

## DECLARATION FOR PATENT APPLICATION

(98S0190P1)

As a below named inventor, I declare that my residence, post office address and citizenship are as stated below above my name; I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

NITRIDE SEMICONDUCTOR GROWTH METHOD, NITRIDE  
SEMICONDUCTOR SUBSTRATE, AND NITRIDE  
SEMICONDUCTOR DEVICE

the specification of which (check applicable box(es)).

☐ is attached hereto.

☒ was filed on April 9, 1998 as United States Application No. or PCT International Application  
No. PCT/JP98/01640.

☐ and was amended on

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 35 U.S.C. 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed:

Japanese Patent Application No. 9-093315, filed April 11, 1997	Priority Claimed
Japanese Patent Application No. 9-174494, filed June 30, 1997	Priority Claimed
Japanese Patent Application No. 9-181071, filed July 7, 1997	Priority Claimed
Japanese Patent Application No. 9-201477, filed July 28, 1997	Priority Claimed
Japanese Patent Application No. 9-277448, filed October 9, 1997	Priority Claimed
Japanese Patent Application No. 9-290098, filed October 22, 1997	Priority Claimed
Japanese Patent Application No. 9-324997, filed November 26, 1997	Priority Claimed

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s) or 35 U.S.C. 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, which became available between the filing date of the prior application and the national or PCT international filing date of this application.

I hereby appoint as my attorneys, with full powers of substitution and revocation, to prosecute this application and transact all business in the Patent and Trademark Office connected therewith: Arthur R. Crawford (Reg. No. 25,327), Larry S. Nixon (Reg. No. 25,640), Robert A. Vanderhye (Reg. No. 27,076), James T. Hosmer (Reg. No. 30,184), Robert W. Faris (Reg. No. 31,352), Richard G. Besha (Reg. No. 22,770), Mark E. Nusbaum (Reg. No. 32,348) and Michael J. Keenan (Reg. No. 32,106), each of whose address is 8th Floor, 1100 North Glebe Road, Arlington, Virginia 22201-4714, or any one of them, and request that correspondence be directed to Nixon & Vanderhye P.C., 8th Floor, 1100 North Glebe Road, Arlington, Virginia 22201-4714.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

[1st Inventor]

Residence Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima-ken 774-0044 JAPAN

Post Office Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima-ken 774-0044 JAPAN

Country of Citizenship: Japan.

Date: November 20, 1998

*Hiroyuki Kiyoku*  
Hiroyuki Kiyoku


[2nd Inventor]

Residence Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima-ken 774-0044 JAPAN

Post Office Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima-ken 774-0044 JAPAN

Country of Citizenship: Japan

Date: November 20, 1998

  
Shuji Nakamura


[3rd Inventor]

Residence Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima-ken 774-0044 JAPAN

Post Office Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima-ken 774-0044 JAPAN

Country of Citizenship: Japan

Date: November 20, 1998

  
Tokuya Kozaki

[4th Inventor]

Residence Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima-ken 774-0044 JAPAN

Post Office Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima-ken 774-0044 JAPAN

Country of Citizenship: Japan

Date: November 20, 1998

  
Naruhito Iwasa

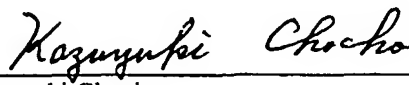
[5th Inventor]

Residence Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima-ken 774-0044 JAPAN

Post Office Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima-ken 774-0044 JAPAN

Country of Citizenship: Japan

Date: November 20, 1998

  
Kazuyuki Chocho

# ASSIGNMENT

(98S0190P1)

In consideration of value received, I, having a residence as stated below above my name, the sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are listed below) of an invention described in an application for United States patent entitled:

NITRIDE SEMICONDUCTOR GROWTH METHOD, NITRIDE  
SEMICONDUCTOR SUBSTRATE, AND NITRIDE  
SEMICONDUCTOR DEVICE

sell and assign to

NICHIA CHEMICAL INDUSTRIES, LTD., a Japanese corporation, having a place of business at 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima-ken 774-0044 JAPAN

its successors, and assigns or nominees, hereinafter referred to as "Assignee", my entire right, title and interest in and to said invention as disclosed, shown and described in said United States patent application:

(check one) ☒ executed concurrently herewith;

☐ executed on

☐ Application No.

, filed

and in and to all applications for patent and patents for invention, in all countries of the world, including all divisions, reissues, continuations, substitutes and extensions thereof and all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property, including rights of priority, resulting from the filing of any of said applications; and I authorize and request any official whose duty is to issue patents, to issue any patent on said invention or resulting therefrom to said Assignee, and I agree that on request and without further consideration, but at the expense of said Assignee, I will communicate to said Assignee or its representatives all facts known to me respecting said invention and testify in any legal proceedings, sign all lawful papers, execute all divisional, continuing, reissue, or other applications, make all rightful oaths and declarations, and generally do everything possible to aid said Assignee to obtain and enforce proper patent protection for said invention in all countries.

I hereby grant the following law firm the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the Rules of the U.S. Patent and Trademark Office for recordation of this document.

Nixon & Vanderhye, P.C., 8th Floor, 1100 North Glebe Road, Arlington, Virginia 22201-4714, U. S. A.

## [1st Inventor]

Residence Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima-ken 774-0044 JAPAN

Post Office Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima-ken 774-0044 JAPAN

Country of Citizenship: Japan

Date: November 20, 1998

*Hiroyuki Kiyoku*

Hiroyuki Kiyoku

## [2nd Inventor]

Residence Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima-ken 774-0044 JAPAN

Post Office Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima-ken 774-0044 JAPAN

Country of Citizenship: Japan

Date: November 20, 1998

*Shuji Nakamura*

Shuji Nakamura

[3rd Inventor]

Residence Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima-ken 774-0044 JAPAN

Post Office Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima-ken 774-0044 JAPAN

Country of Citizenship: Japan

Date: November 20, 1998



Tokuya Kozaki

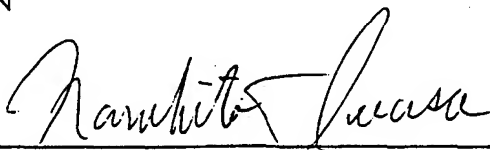
[4th Inventor]

Residence Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima-ken 774-0044 JAPAN

Post Office Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima-ken 774-0044 JAPAN

Country of Citizenship: Japan

Date: November 20, 1998



Naruhito Iwasa


[5th Inventor]

Residence Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima-ken 774-0044 JAPAN

Post Office Address: c/o NICHIA CHEMICAL INDUSTRIES, LTD., 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima-ken 774-0044 JAPAN

Country of Citizenship: Japan

Date: November 20, 1998



Kazuyuki Chocho

After recording please return to:

Nixon & Vanderhye, P.C.

8th Floor, 1100 North Glebe Road, Arlington, Virginia 22201-4714, U. S. A.